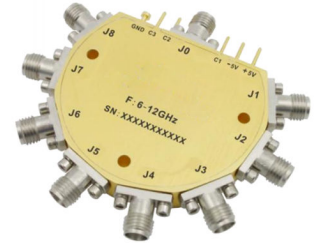


Absorptive 6-12GHz Coaxial SP8T Switch

Features

- Wide Band Operation 6-12GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request



Typical Applications

- Wireless Infrastructure
- Military & Aerospace
- Fiber Optics

RF Microwave & VSAT
Test Instrument

Parameters	Min	Typ.	Max	Units
Frequency Range		6-12		GHz
Insertion Loss		2.4	3	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	80	85		dB
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
RF Input power	30			dBm
DC Power Dissipation		0.4		W
0.1dB Compression P0.1dB		30		dBm
IIP3		55		dBm
Switching Speed		100		ns
Weight		1.76		ounces
Impedance		50		Ω
Biasing(+5V/-5V)		350/50		mA
Input /Output Connector	SMA-Female			
Finishing	Gold Plating			
Material	Aluminum			
Seal	Hermetically Sealed (optional)			



Absolute Maximum Ratings

Biasing	+5V ± 10%/-5V ± 10%
TTL Control Voltage	0~0.8V/2.8~5V

Environmental Specifications

Operational Temperature	-45°C~+85°C
Storage Temperature	-55°C~+125°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Uncontrolled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Ordering Information

Part No.	ECCN	Description
DBSA0806001200B	EAR99	SP8T 6-12GHz PIN Diode Switch

Outline Drawing:

All Dimensions in mm (inches)

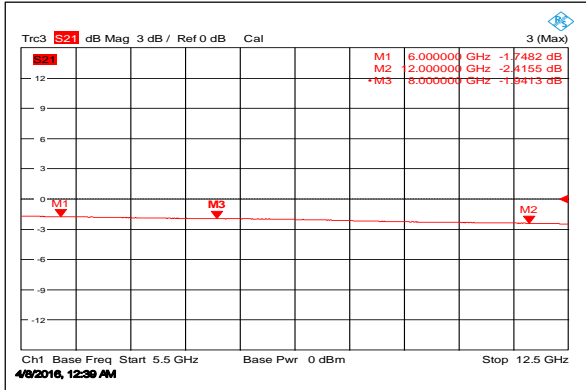
Truth Table

Control Input TTL			Signal Path State
C3	C2	C1	
0	0	0	J0-J1
0	0	1	J0-J2
0	1	0	J0-J3
0	1	1	J0-J4
1	0	0	J0-J5
1	0	1	J0-J6
1	1	0	J0-J7
1	1	1	J0-J8

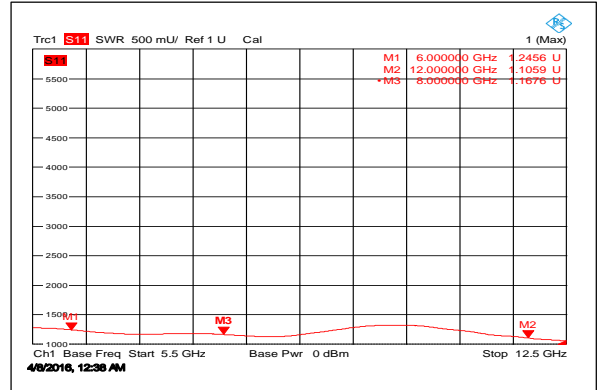
Control Pin Customization available upon request



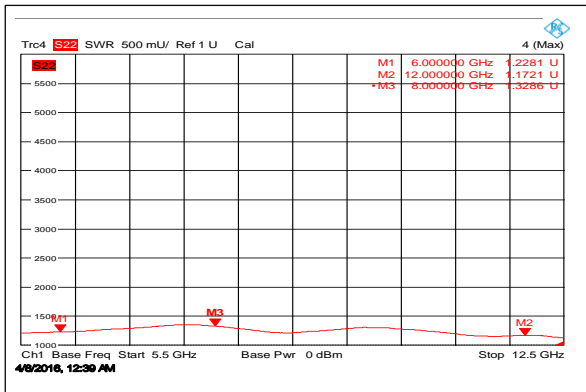
Insertion Loss



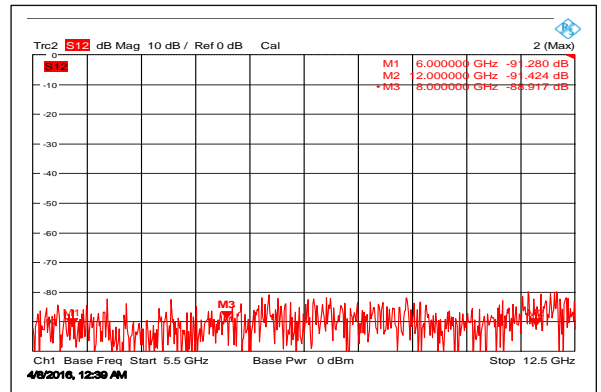
Input VSWR



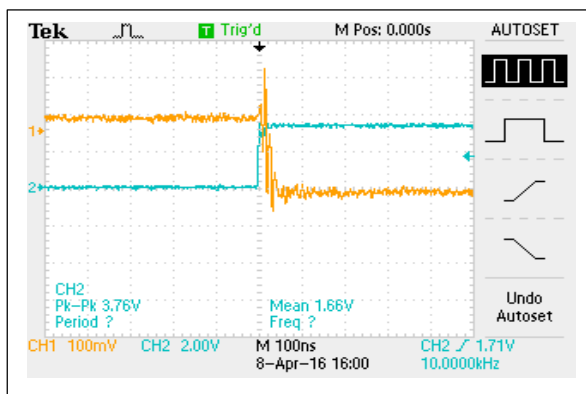
Output VSWR



Isolation



Turn on Switching Speed



Turn off Switching Speed

